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ABSTRACT

The Mink Scale is designed to differentiate between potential dropout and non-dropout students at the junior high school level. Items of the scale represent social, psychological, and educational factors established in previous dropout studies. A pilot study in five Appalachian counties compared scale responses for 189 (dropouts) former students who were in the seventh grade in 1961 and 262 (non-dropouts) high school seniors who were also in the seventh grade in 1961. A Chi-square test was employed to analyze each item. The great majority of the items not only discriminate significantly between total dropouts and non-dropouts but also between male dropouts and male non-dropouts, or female dropouts and female non-dropouts. A copy of the scale is included with the differentiating powers of each item indicated. A more detailed description of the scale is provided in TM 000 248. (LR)

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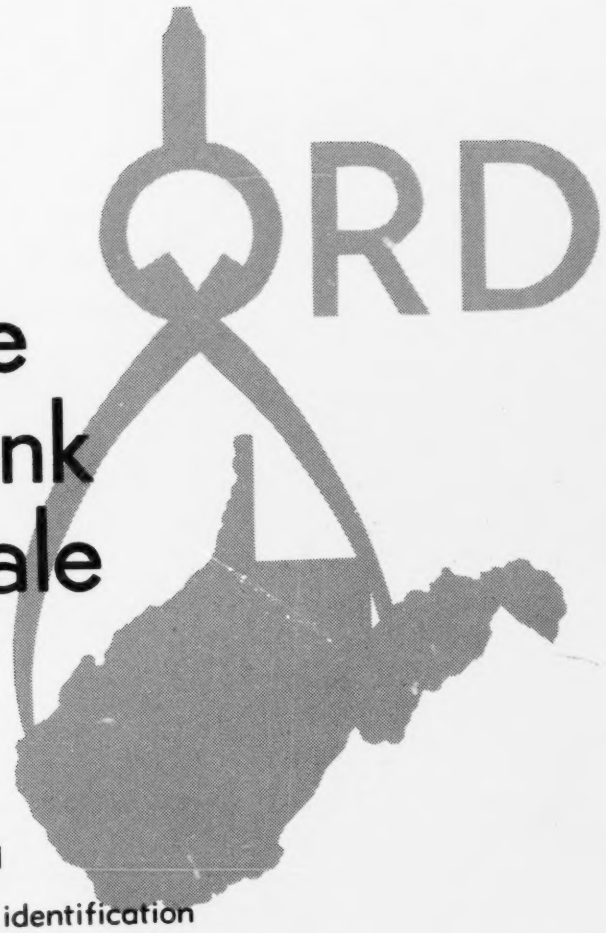
the mink scale



An aid
in the identification
of dropout prone students
in the
Appalachian Junior High Schools

OFFICE OF RESEARCH AND DEVELOPMENT
Appalachian Center • West Virginia University • Morgantown

PREFACE

The Office of Research and Development of West Virginia University's Appalachian Center is vitally concerned with bridging research and the uses to which that research may be put. Applications of research to rational action are reported in the Office's Information Series. Hopefully, suck applications will be made to the most important problems of West Virginia.

One of the most pressing concerns confronting West Virginia today is the increased development of more of its people. This has been referred to in a number of ways including the need for more widespread leadership development and manpower development. There are a number of approaches which appear useful for attempting to deal with the problem as it affects people of various ages and positions in society. Certainly, one of the most important of these, is education—primary, secondary, and higher.

While increasing the quality of education is an important aspect of this approach, an equally important aspect is that of attempting to extend the benefits of education to more people for more years of educational attainment. This, of course, means dealing with the conditions which result in dropouts, particularly at the primary and secondary levels.

The ideas presented in this paper deal with one approach to solving the dropout problem. If this paper accomplishes the purpose for which it was written, and the research upon which it is based, it will be followed by far more widespread and more rational efforts to forestall dropouts.

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ED044431

THE MINK SCALE

An aid in the identification of dropout prone students in the Appalachian Junior High Schools

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Information Series 1

TM 000 125

Office of Research and Development
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INTRODUCTION

The large number of youth who discontinue their education before the completion of high school represents one of our most pressing national problems. In West Virginia the problem is especially great because the percentage of youth who do not complete high school is greater than in most states. Of West Virginia public school children entering the ninth grade in 1961, only 61.8 percent graduated from high school four years later (State Rankings, 1965).

The reasons so many students discontinue their education are undoubtedly many. But however complex the problem may be, ignoring it is to abdicate a responsibility. The school is obligated to do what it can to remedy the dropout problem. Individual schools, through intensive efforts at identification of dropout prone students, and constructive programs for those who are dropout-prone, can greatly aid in the reduction of the problem.

The purposes of this bulletin are two-fold. First, the Mink Scale will be discussed as an aid in the identification of dropout prone students in the junior high school. Second, an invitation will be extended to local school officials to use the Scale as an aid in the identification of dropouts prone students in their schools.

DESCRIPTION OF THE SCALE

The Mink Scale (see Appendix) consists of items grouped into four sections:

(1) academic ability and performance,

(2) negative identification with education,

(3) family and socio-economics status, and

(4) personal. Items in the Scale roughly represent the social, psychological, and educational forces found to be related to dropouts in previous dropout studies (Mink, 1966). The Scale items are to be completed for students concerned by school officials who are preferably well acquainted with the students, and will use school records, informants, and personal knowledge of the students to complete the Scale items.

THE PILOT STUDY

The ability of items on the Mink Scale to differentiate between dropouts and non-dropouts was assessed in a pilot study conducted during the 1966-67 academic year. Subjects for the study consisted of 189 former students (dropouts) who were in the seventh grade in 1961 and 262 high school seniors (non-dropouts) who had also attended seventh grade in 1961. Subjects for the study came from five school systems in five Appalachian counties, four in West Virginia and one in Pennsylvania.

The Mink Scale was completed for each subject in the study by the school counselor in three counties and by a research assistant from West Virginia University in two counties. School records were the primary source of information for completion of the items; however, school personnel well acquainted with the students also provided information for many items. All information was recorded retrospectively in terms of information relating to the seventh grade or as near the seventh grade as possible, **i.e.,** intelligence quotient obtained in grade seven and number of days absent in grade seven.

In essence, the design of the pilot study allowed a comparison of the Scale items between 262 seventh grade students who persisted to graduation (non-dropouts) and 189 students who discontinued their education before completion of high school (dropouts). The data were analyzed by Chi-Square tests computed for each item for (1) total dropouts and total non-dropouts, (2) male dropouts

and male non-dropouts and (3) female dropouts and female non-dropouts.

RESULTS OF THE PILOT STUDY

Only a summary discussion of the results will be presented here. A complete report of the findings, including distributions of dropout and non-dropout responses are presented in another West Virginia University-Appalachian Center publication.*

Academic Ability and Performance. All of the items in the section academic ability and performance significantly differentiated between groups of dropouts and non-dropouts with one exception. There was no significant difference between the number of courses being failed by female dropouts and female non-dropouts in the seventh grade. However, female dropouts were lower in accademic performance than female non-dropouts as evidenced by differences in number of years retained, grade point average, and reading level.

The measured ability of the dropouts as a group on paper and pencil tests appeared to be lower than the non-dropouts. Only 21.5 percent of the dropouts had an IQ score of above 100, while 63.6 percent of the non-dropouts had an IQ score of above 100.

The reading level of dropouts was below that of the non-dropouts as evidenced by the fact that 40.3 percent of the dropouts were reported to be two or more years below grade level in reading, while only 6.3 percent of the non-dropouts were two or more years below grade level. The finding that dropouts as a group were older than non-dropouts was expected as a result of dropouts having been retained more often.

In summary, all of the items in this section, academic ability and performance appear to be important dropout indicators.

Negative Identification with Education. All of the items in the section, "negative identification with education," differentiated dropouts and non-dropouts, with the exception of item nine, apparentness of being overage. This item did not significantly differentiate the two female groups. Some of the most interesting differences revolved around participation in school related activities. Seventy-one percent of the dropouts did not participate in extra-curri-

*O. G. Mink and Lawrence W. Barker, "Dropout Proneness in Appalachia", **Research Series No. 3,** Office of Research and Development, West Virginia University, Morgantown, 1968.

cular activities (item 2) while only 28 percent of the non-dropouts did not participate in extra-curricular activities. Item five revealed that 67.6 percent of the dropouts did not attend formal school functions such as dances and parties, while 27 percent of the non-dropouts did not attend.

Items four and eight revealed that potential dropouts were at a disadvantage with regard to their relationships with peers and teachers. Twenty-three percent of the dropouts were seen as not being liked by their schoolmates, while only 2.8 percent of the "stay-ins" were seen not liked by schoolmates.

Whereas teachers were not seen as liking or showing an interest in 41.3 percent of the dropouts, only 13.1 percent of the non-dropouts were seen this way by school officials who completed the scales.

Another interesting finding regarding teacher-pupil relationships was that 57.1 percent of the dropouts were reported as not particularly liking a teacher or teachers. Only 36.5 percent of the non-dropouts were reported as not liking a teacher or teachers.

As is is usually the case with those who discontinue school, the dropouts were reported as being absent from school more often than non-dropouts. For the subjects under study, 39 percent of the dropouts were absent more than twenty days in seventh grade as compared to 4 percent of the non-dropouts.

Family and Socio-Economic Status. The educational and financial levels of parents of students were found to be important dropout indicators. Regarding the educational level of parents, 52.1 percent of the mothers and 56.6 percent of the fathers of dropouts had an eighth grade education or less. The corresponding percentages for parents of non-dropouts were 13.1 for mothers and 16.8 for fathers. When comparing the estmated family incomes of the two groups, 41.9 percent of the families of dropouts had an income of less than $3,000 as compared to 11.4 percent for the families of non-dropouts. The occupational level of the father was a differentiating factor for males and total dropouts but not for females. For total dropouts, 90 percent of the fathers were engaged in unskilled or semi-skilled occupations as opposed to 70.3 percent for the fathers of non-dropouts.

Evidence of parental interest in school policies and practices also differentiated the dropouts and non-dropouts. Seventy-six percent of the dropouts' parents were reported not being interested in school practices as compared to 24.7 percent of the parents of non-dropouts.

Personal. The personal section of the scale revealed differences between dropouts and non-dropouts in the areas of personal feelings, number of schools attended, discipline, and peers. Regarding personal finances, 38.1 percent of the dropouts appeared to lack the basic financial requirements for school as opposed to only 4.2 percent of the non-dropouts.

Dropouts were seen by the school officials completing the scales as more often feeling sorry for themselves. Fifty-eight percent of the dropouts were reported as sometimes or frequently feeling sorry for themselves as compared to 23.4 percent for non-dropouts. Dropouts, when compared to non-dropouts, were also reported as feeling that standards were set too high for them. The analysis of scale responses indicated that 64.1 percent of the dropouts sometimes or frequently felt standards were too high as compared with 30.4 percent of the non-dropouts.

Frequency of changing school may play a part in a student's future continuance or discontinuance in school. Thirty-seven percent of the dropouts, by seventh grade, had attended three or more schools as compared to 22.5 percent of the non-dropouts.

The more frequent involvement of dropouts in discipline cases was evidenced by the finding that 10.3 percent of the dropouts had a frequent discipline record as compared to 1.5 percent of the non-dropouts. Also, as reported by teachers, 39.1 percent of the dropouts were sometimes or frequently irritating in class, compared to 10.9 percent of the non-dropouts.

The idea that potential dropouts seek companionship with each other was supported by the finding that 53.2 percent of the dropouts had a best friend who was described as planning to quit school. Only 3.1 percent of the non-dropouts had a best friend who was viewed as planning to quit school.

SUMMARY

The items on the Mink Scale, according to previous research on similar items and the current pilot study, appear to be important indicators of dropout proneness for junior high school students. In the pilot study, the majority of items differentiated between total groups of dropouts and non-dropouts. The items differentiating males, females, and/or total groups can be found by consulting the Scale presented in the Appendix.

USE OF THE SCALE BY SCHOOLS

The Division of Clinical Studies of the College of Human Resources and Education at West Virginia University will cooperate with elementary and junior high schools in the Appalachian region that wish to use the Mink Scale to aid in the identification of drop-out prone students. Interested users may reproduce their own copies of the Scale or portions thereof. Scoring assistance can be provided by the Division of Clinical Studies.

The instrument should be used as a means of aiding professional judgment. Students whose profiles compare more favorably to dropouts than non-dropouts should be considered likely candidates for dropouts. Upper elementary and junior high or middle school personnel should make every effort to remedy deficient conditions. Where appropriate, assistance of public welfare and rehabilitation workers should be solicited in aiding the family to encourage school participation and attendance. Each Scale item indicating a student deficiency suggests an area of needed remedy.

All inquiries regarding the Scale should be directed to:

Dr. Oscar G. Mink, Director
College of Human Resources and Education
Division of Clinical Studies
West Virginia University
Morgantown, West Virginia 26506

REFERENCES

State Rankings 1964-65, **National Education-Association Research Bulletin,** Vol. 43, February 1965, pp. 24-31.

Mink, O. G. "A Dropout Proneness Scale to Identify Potential Dropouts in the Appalachian Region Junior High Schools," Unpublished Proposal for the Appalachian Educational Laboratory, Inc., Charleston, West Virginia, August 1966, pp. 19-20 and Appendix A.

Mink, O. G. and Lawrence W. Barker, "Dropout Proneness in Appalachia," **Research Series 3,** Office of Research and Development, West Virginia University, Morgantown, 1968

APPENDIX

Part I

ACADEMIC ABILITY AND PERFORMANCE

* + # 1. How many years older or younger is he than other students in his grade? 0 ☐ 1 ☐ 2 ☐ 3 or more ☐

* + # 2. Has he been retained in grade? No ☐ 1 yr. ☐ 2 yrs. ☐ 3 yrs. ☐ 4 or more ☐

* + # 3. What is his current grade point average? A ☐ B ☐ C ☐ D ☐ F ☐

* + 4. Is he presently failing any subject? No ☐ 1 ☐ 2 ☐ 3 ☐ 4 or more ☐

* + # 5. Is his reading level below his grade level? No ☐ 1 yr. ☐ 2 yrs. ☐ 3 yrs. ☐ 4 or more ☐

* + # 6. What is his IQ score?
Below 70 ☐ 70-79 ☐ 80-89 ☐ 90-100 ☐ Above 100 ☐

* + # 7. Special projects completed in or outside of school?
0 ☐ 1 ☐ 2 ☐ 3 ☐ 4 or more ☐

Describe .....

.....

.....

* + # 8. Special hobbies? Specify
0 ☐ 1 ☐ 2 ☐ 3 ☐ 4 or more ☐

.....

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Part II

NEGATIVE IDENTIFICATION WITH EDUCATION

* + # 1. Is he usually happy in school? Yes ☐ No ☐

* + # 2. Does he participate in extracurricular activities such as sports, band, clubs? Yes ☐ No ☐

* + # 3. Is he absent 20 or more days a year? (pro-rate) Yes ☐ No ☐

* + # 4. Does he seem to be liked by his schoolmates? Yes ☐ No ☐

* + # 5. Does he attend formal school functions? (Dances, parties, special clubs, etc.) Yes ☐ No ☐

* + # 6. Does he claim little or no interest in schoolwork? Yes ☐ No ☐

* + # 7. Does he resent school control? Yes ☐ No ☐

* + # 8. Do the teachers like or show an interest in him? Yes ☐ No ☐

* + 9. Is overageness apparent? Yes ☐ No ☐

* + # 10. Does he like to read? Yes ☐ No ☐

* + # 11. Does he seem to particularly like a teacher or teachers? Yes ☐ No ☐

Part III

FAMILY AND SOCIO-ECONOMIC STATUS

* + 1. Is father's occupation unskilled or semiskilled? Please list ..... Yes ☐ No ☐

* + # 2. Is the parents' attitude apathetic or negative toward completing his high school education? Yes ☐ No ☐

* + # 3. Education completed by mother:
Post H.S. ☐ H.S. Grad ☐ 8-11 ☐ 5-8 ☐ Less than 5 ☐

* + # 4. Education completed by father:
Post H.S. ☐ H.S. Grad ☐ 8-11 ☐ 5-8 ☐ Less than 5 ☐

* 5. Number of brothers and/or sisters who did not finish high school. 0 ☐ 1 ☐ 2 ☐ 3 ☐ 4 or more ☐

* + # 6. What is the estimated family income?
Less than $3,000 ☐ 3,000-8,000 ☐ 8,000+ ☐

* + # 7. Are parents interested in school policies and practices? Yes ☐ No ☐

Part IV

PERSONAL

* + # 1. Does the student appear to lack the basic financial requirements of school? Explain. Yes ☐ No ☐

.....

* + # 2. Does the student feel sorry for himself? Seldom ☐ Sometimes ☐ Freq. ☐

* + # 3. Does he feel that standards are set too high for him? Seldom ☐ Sometimes ☐ Freq. ☐

* + 4. How many schools has he attended? 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 or more ☐

* + # 5. Does he have a discipline record at school? Seldom ☐ Sometimes ☐ Freq. ☐

* + # 6. Do teachers say he is irritating in class? Seldom ☐ Sometimes ☐ Freq. ☐

* + # 7. Would you describe his best friend as planning to quit school? Yes ☐ No ☐

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* Item significantly differentiated ($P<.05$) between total dropouts and non-dropouts

\+ Item significantly differentiated ($P<.05$) between male dropouts and male non-dropouts

\# Item significantly differentiated ($P<.05$) between female dropouts and female non-dropouts